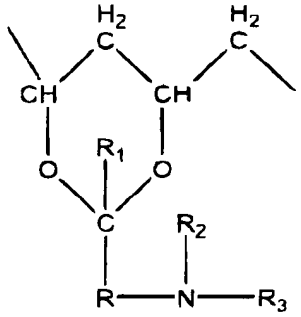
6. (Once Amended) The [hydrogel biomedical article] microparticle of claim 1, wherein the macromer has the formula:



in which R is a linear or branched C_1-C_8 alkylene or a linear or branched C_1-C_{12} alkane; R_1 is hydrogen, a C_1-C_6 alkyl, or a cycloalkyl; R_2 is hydrogen or a C_1-C_6 alkyl; and R_3 is an olefinically unsaturated electron attracting copolymerizable radical having up to 25 carbon atoms.

8. (Once Amended) The [hydrogel biomedical article] microparticle of claim 1, further comprising an active agent.

9. (Once Amended) The [hydrogel biomedical article] microparticle of claim 8, wherein the [hydrogel] microparticle releases the active agent over a period of time ranging from about 1 day to 6 months.

10. (Once Amended) The [hydrogel biomedical article] microparticle of claim 1, wherein the [hydrogel] microparticle is biodegradable.

11. (Once Amended) The [hydrogel biomedical article] microparticle of claim 1, further comprising a contrast agent.

12. (Once Amended) The [hydrogel biomedical article] microparticle of claim 1, wherein the crosslinkable groups are crosslinked via free radical polymerization.

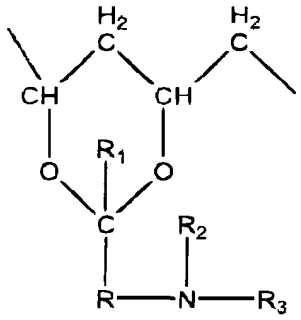
13. (Once Amended) The [hydrogel biomedical article] microparticle of claim 11, wherein the free radical polymerization is redox initiated.

Please add the following new claims.

39. (New Claim) A hydrogel biomedical article formed from macromers having a polymeric backbone comprising units having a 1,2-diol or 1,3-diol structure and at least two pendant chains bearing crosslinkable groups, wherein the crosslinkable groups are crosslinked via redox initiated free radical polymerization.

40. (New Claim) The hydrogel biomedical article of claim 39, wherein the backbone polymer comprises poly(vinyl alcohol) (PVA) and copolymers thereof.

41. (New Claim) The hydrogel biomedical article of claim 39, wherein the macromer has the formula:



in which R is a linear or branched C_1-C_8 alkylene or a linear or branched C_1-C_{12} alkane; R_1 is hydrogen, a C_1-C_6 alkyl, or a cycloalkyl; R_2 is hydrogen or a C_1-C_6 alkyl; and R_3 is an olefinically unsaturated electron attracting copolymerizable radical having up to 25 carbon atoms.

42. (New Claim) The hydrogel biomedical article of claim 39, further comprising an active agent.

43. (New Claim) The hydrogel biomedical article of claim 42, wherein the hydrogel releases the active agent over a period of time ranging from about 1 day to 6 months.

44. (New Claim) The hydrogel biomedical article of claim 39, wherein the hydrogel is biodegradable.

45. (New Claim) The hydrogel biomedical article of claim 39, further comprising a contrast agent.

46. (New Claim) The hydrogel biomedical article of claim 39, wherein the article is selected from the group consisting of a catheter, tubing, vascular graft, heart valve, suture, prosthesis, dialysis membrane, filter, sensor, wound dressing, and drug delivery article.

47. (New Claim) The hydrogel biomedical article of claim 39, wherein the article is a microsphere.

48. (New Claim) The hydrogel biomedical article of claim 39, wherein the hydrogel is a coating.

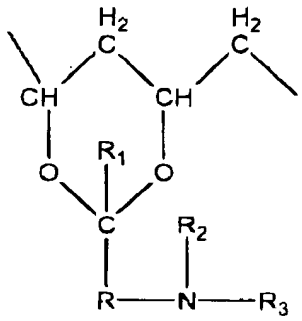
cancel 49. (New Claim) The hydrogel biomedical article of claim 39, wherein the article is formed in a mold.

50. (New Claim) The hydrogel biomedical article of claim 39, wherein the article is formed on a substrate.

51. (New Claim) A hydrogel biomedical article formed from macromers having a polymeric backbone comprising units having a 1,2-diol or 1,3-diol structure and at least two pendant chains bearing crosslinkable groups, wherein the article is biodegradable.

52. (New Claim) The hydrogel biomedical article of claim 51, wherein the backbone polymer comprises poly(vinyl alcohol) (PVA) and copolymers thereof.

53. (New Claim) The hydrogel biomedical article of claim 51, wherein the macromer has the formula:



in which R is a linear or branched C_1-C_8 alkylene or a linear or branched C_1-C_{12} alkane; R_1 is hydrogen, a C_1-C_6 alkyl, or a cycloalkyl; R_2 is hydrogen or a C_1-C_6 alkyl; and R_3 is an olefinically unsaturated electron attracting copolymerizable radical having up to 25 carbon atoms.

54. (New Claim) The hydrogel biomedical article of claim 51, further comprising an active agent.

55. (New Claim) The hydrogel biomedical article of claim 51, wherein the particle releases the active agent over a period of time ranging from about 1 day to 6 months.

56. (New Claim) The hydrogel biomedical article of claim 51, further comprising a contrast agent.

57. (New Claim) The hydrogel biomedical article of claim 51, wherein the article is selected from the group consisting of a catheter, tubing, vascular graft, heart valve, suture, prosthesis, dialysis membrane, filter, sensor, wound dressing, and drug delivery article.

58. (New Claim) The hydrogel biomedical article of claim 51, wherein the article is a microsphere.

59. (New Claim) The hydrogel biomedical article of claim 51, wherein the hydrogel is a coating.

60. (New Claim) The hydrogel biomedical article of claim 51, wherein the article is formed in a mold.

61. (New Claim) The hydrogel biomedical article of claim 51, wherein the article is formed on a substrate.

REMARKS

Claim Amendments

Claim 1 has been amended to incorporate the limitation of claim 16, so that it now states that the biomedical article is a microparticle formed from macromers having a polymeric backbone comprising units having a 1,2-diol or 1,3-diol structure and at least two pendant chains bearing crosslinkable groups.

New claims 39 and 51 recite claims 13 and 10, respectively, in independent form. Claim 39 recites a hydrogel biomedical article formed from macromers having a polymeric backbone comprising units having a 1,2-diol or 1,3-diol structure and at least two pendant chains bearing crosslinkable groups, wherein the crosslinkable groups are crosslinked via redox initiated free radical polymerization.

New claim 51 recites a hydrogel biomedical article formed from macromers having a polymeric backbone comprising units having a 1,2-diol or 1,3-diol structure and at least two pendant chains bearing crosslinkable groups, wherein the article is biodegradable.

Claims 2-4, 7, and 14-38 were cancelled to reduce the total number of claims. Claims 5, 6, and 8-13 were amended to reflect the changes to claim 1.